#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1x.28

## WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026794 Address: 333 Burma Road **Date Inspected:** 01-Dec-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1630 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

**CWI Name:** Bernie Docena **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Bike Path - Skyway

#### **Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived on the jobsite between the times noted above to randomly observe Quality Control (QC) personnel monitor the welding operations performed by American Bridge Fluor (ABF) welding personnel. The following observations made on this date were:

CCO: 178 - Description: Modify the existing Bike Path belvederes, Bike Path maintenance traveler, and existing maintenance traveler rail to allow passage of the traveler on the Skyway portion of the East Span SFOBB. This QA Inspector randomly observed ABF welder Mr. Gil Peralta performing the Air-Carbon-Arc gouge operation to remove the remnant material - (at least 10 mm of material) of the section of the architectural beam that was previously removed by others from the bottom panel of the Bike Path at Pier Location 10E - (west side location).

This QA Inspector observed that there were three (3) areas on the bottom panels' base metal that were gouged into from the Air-Carbon-Arc gouge operation that required weld repair from the removal of the portion of the architectural beam. After the base metal was repaired per the SMAW process in the overhead position by ABF Welder Gil Peralta (Welder ID 9543), the repaired areas were ground flush and smooth to the base metal surface. Afterwards, this QA Inspector randomly observed ABF welder Mr. Gil Peralta (Welder ID 9543) performing the fillet weld operation on the new cover plate to the remaining architectural beam of the Belvedere at Pier Location 10E - (west side location) per the Shielded Metal Arc Welding (SMAW) process in the (3F) vertical and (4F) overhead positions.

Note: This QA Inspector observed that before, during, and after the fillet weld operation was completed, no QC

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Inspector was present to: 1) verify that the preheat temperature was at the required minimum temperature of 70 degrees F; 2) inspect and approve the joint preparation and joint fit-up; 3) inspect the assembly practice; 4) verify the welding technique; and 5) verify the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-F1200A and the performance of ABF welder Mr. Gil Peralta (Welder ID 9543).

This QA Inspector observed that the Contractor's QC Inspector was not present from 7:00 to 13:00 and at approximately 13:10, the QC Inspector Mr. Bernie Docena arrived at Pier Location 10E. The QC Inspector was present to perform the final visual inspection of the Bike Path bottom panel at two (2) locations where the portion of the architectural beam was removed. Also, the QA Inspector observed QC Inspector Mr. Bernie Docena perform the final visual inspection of the fillet weld connecting the cover plate to the existing architectural beam to verify the fillet weld size and weld quality. The fillet weld size and quality visually appeared to be in general compliance with AWS D1.5-2002 Section 3.6.

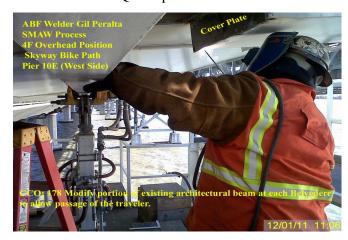
This QA Inspector did not generate an Incident Report on this date for the above non-compliance with the Conformed Special Provisions Section 8.3 due to an issue involving ABF's subcontractor Quality Control Company Smith-Emery obtaining vehicle transportation for QC Inspector Mr. Bernie Docena to the Skyway portion of the East Span SFOBB from the SAS portion of the East Span SFOBB.

This is the second occurrence involving the Contractors' Quality Control not present during the welding operations on the modified portions of the Architectural Beam. The first occurrence was at Pier 12E (the east side location of the Belvedere) on 11-29-11 due to ABF Quality Control Manager Mr. Chuck Kanipicky' oversight in communicating the request for inspection to Quality Control and the second occurrence was on this date at Pier 10E (the west side location of the Belvedere) for ABF's subcontractor Quality Control Company Smith-Emery's mishap in providing vehicle transportation to Quality Control Inspector Mr. Bernie Docena.

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This QA Inspector observed ABF personnel performing the drilling operation for the installation of additional mounting bolts - (19 mm diameter) in the existing box girder web plate of the Bike path box girder and the Bike Path maintenance traveler outer rail. This QA Inspector observed that ABF personnel were in-process on the drilling operation and were working towards Pier location 12E at the end of this QA Inspectors' shift.





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## **Summary of Conversations:**

This QA Inspector notified ABF's QC Inspector Mr. Bill Norris at approximately 9:45 via phone message to inform that there were welding operations being performed by ABF welding personnel at Pier 10E (west side location) of the architectural beam at the Belvedere.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer